

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/052065

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B21C37/04 B32B15/01 C22C47/04 B23P17/06 B32B15/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B21C B32B C22C B23P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 97/04152 A (DEWAEGHENEIRE GABRIEL ; BEKAERT SA NV (BE); STEENLANDT WIM VAN (BE); V) 6 February 1997 (1997-02-06) page 3, line 9 - line 32; claim 1 page 8, line 10 - line 15	1,18-30
Y	US 3 940 964 A (TODOROKI TSUNEHICO ET AL) 2 March 1976 (1976-03-02) column 3, line 21 - line 32 column 4, line 19 - line 24 claims 1-8; figures 1,2; table 1	1,18-30
X	EP 0 764 488 A (SINTOKOGIO LTD) 26 March 1997 (1997-03-26) column 1, line 40 - column 5, line 20; claims 6,7,9; figure 9	31
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- \*P\* document published prior to the international filing date but later than the priority date claimed

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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

17 December 2004

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13/01/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 319 959 A (NIBEX CO LTD ; YANAGISAWA AKIRA (JP)) 14 June 1989 (1989-06-14) cited in the application -----	

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/052065

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 9704152	A	06-02-1997	BE	1009485 A3		01-04-1997
			AT	196326 T		15-09-2000
			CA	2226990 A1		06-02-1997
			CN	1191001 A		19-08-1998
			DE	69610317 D1		19-10-2000
			DE	69610317 T2		01-03-2001
			WO	9704152 A1		06-02-1997
			EP	0839221 A1		06-05-1998
			ES	2152547 T3		01-02-2001
			JP	11509278 T		17-08-1999
			US	6025282 A		15-02-2000
US 3940964	A	02-03-1976	NONE			
EP 0764488	A	26-03-1997	JP	9157783 A		17-06-1997
			DE	69614208 D1		06-09-2001
			DE	69614208 T2		16-05-2002
			EP	0764488 A1		26-03-1997
			US	6063332 A		16-05-2000
EP 0319959	A	14-06-1989	JP	1316137 A		21-12-1989
			JP	1153231 A		15-06-1989
			CA	1320616 C		27-07-1993
			CN	1036352 A ,B		18-10-1989
			DE	3880451 D1		27-05-1993
			DE	3880451 T2		25-11-1993
			EP	0319959 A2		14-06-1989
			US	4930199 A		05-06-1990